

03500.015786.1

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
	:	Previous Examiner: K. Srivastava
TSUTOMU HONMA ET AL.)	
	:	Previous Group Art Unit: 1651
Div. of Application No.: 09/951,720)	
	:	
Filed: Herewith)	
	:	
For: METHOD FOR)	
MANUFACTURING A	:	
POLYHYDROXYALKANOATE)	June 25, 2003

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed Form PTO-1449. In accordance with 37 C.F.R. §1.98(d), copies of the documents available in Application No. 09/951,720, from which the present application claims benefit under 35 U.S.C. § 120, are not enclosed.

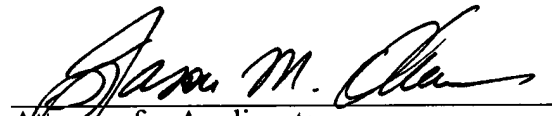
The concise explanation of relevance for the non-English documents may be found, inter alia, in the specification where they are cited and/or in the English language abstracts attached thereto. In addition, the concise explanation of relevance for JP 63-226291 may be found in corresponding U.S. Patent No. 5,135,859.

CONCLUSION

It is respectfully requested that the above information be considered by the Examiner and that a copy of the enclosed Form PTO-1449 be returned indicating that such information has been considered.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,


Attorney for Applicants
Registration No. 48,512

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FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary)				ATTY DOCKET NO. 03500.015786.1		APPLICATION NO. Div. of 09/951,720	
				APPLICANT Tsutomu Honma et al.			
				FILING DATE Herewith		GROUP N.Y.A.	
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		4,393,167	07/12/83	Holmes et al.	525	64	
		4,876,331	10/24/89	Doi	528	361	
		5,200,332	04/06/93	Yamane et al.	435	135	
		5,292,860	03/08/94	Shiotani et al.	528	361	
		5,135,859	08/04/92	Witholt et al.	435	135	
		6,485,951 B2	11/26/02	Yano et al.	435	190	
		6,492,147 B2	12/10/02	Imamura et al.	435	135	
		6,521,429 B2	02/18/03	Honma et al.	435	135	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES/NO/ OR ABSTRACT
	EP	1 113 033	07/04/01	Europe			
	JP	63-226291	09/20/88	Japan			Abstract
	JP	2989175	12/13/99	Japan			Abstract
	JP	5-64591	03/19/93	Japan			Abstract
	JP	5-214081	08/24/93	Japan			Abstract
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
		Alan Grund et al., "Regulation of Alkane Oxidation in <i>Pseudomonas putida</i> ," 123(2) <u>J. Bacteriol.</u> 546-556 (1975).					
		Y.B. Kim et al., "Preparation and Characterization of Poly(β -Hydroxyalkanoates) Obtained from <i>Pseudomonas oleovorans</i> with Mixtures of 5-Phenylvaleric Acid and <i>n</i> -Alkanoic Acids," 24 <u>Macromol.</u> 5256-5260 (1991).					
		Henry J. Vogel et al., "Acetylornithinase of <i>Escherichia coli</i> : Partial Purification and Some Properties," 218 <u>J. Biol. Chem.</u> 97-106 (1956).					
		Katharina Fritzsche et al., "An Unusual Bacterial Polyester with a Phenyl Pendant Group," 191 <u>Macromol. Chem.</u> 1957-1965 (1990).					
EXAMINER				DATE CONSIDERED			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		2001/0055795 A1	12/27/01	Yano et al.	435	135	
		2001/0053544 A1	12/20/01	Yano et al.	435	196	
		2002/0052444 A1	05/02/02	Imamura et al.	525	107	
		2002/0098565 A1	07/25/02	Yano et al.	435	196	
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	JP	6-145311	05/24/94	Japan			Abstract
	JP	6-284892	10/11/94	Japan			Abstract
	JP	7-48438	02/21/95	Japan			Abstract
	JP	8-89264	04/09/96	Japan			Abstract
	JP	9-191893	07/29/97	Japan			Abstract
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
		Suzette M. Aróstegui et al., "Bacterial Polyesters Produced by <i>Pseudomonas oleovorans</i> Containing Nitrophenyl Groups," 32 <u>Macromol.</u> 2889-2895 (1999).					
		Helmut Ritter et al., "Bacterial Production of Polyesters Bearing Phenoxy Groups in Side Chains, 1Poly(3-Hydroxy-5-Phenoxy-pentanoate-co-3-Hydroxy-9-Phenoxy-Nonanoate) From <i>Pseudomonas oleovorans</i> ," 195 <u>Macromol. Chem. Phys.</u> 1665-1672 (1994).					
		YoungBaek Kim et al., "Poly-3-Hydroxyalkanoates Produced From <i>Pseudomonas oleovorans</i> Grown with ω -Phenoxyalkanoates," 29 <u>Macromol.</u> 3432-3435 (1996).					
		Won Ho Park et al., "Epoxidation of Bacterial Polyesters with Unsaturated Side Chains. I. Production and Epoxidation of Polyesters From 10-Undecanoic Acid," 31 <u>Macromol.</u> 1480-1486 (1998).					
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	JP	11-32789	02/09/99	Japan			Abstract
	JP	5-49487	03/02/93	Japan			Abstract
	JP	7-265065	10/17/95	Japan			Abstract

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Won Ho Park et al., "Epoxidation of Bacterial Polyesters with Unsaturated Side Chains. II. Rate of Epoxidation and Polymer Properties," 36 <u>J. Polym. Sci.</u> 2381-2387 (1998).
	Yasuo Takagi et al., "Biosynthesis of Polyhydroxyalkanoate with a Thiophenoxy Side Group Obtained from <i>Pseudomonas putida</i> ," 32 <u>Macromol.</u> 8315-8318 (1999).
	Roland G. Lageveen et al., "Formation of Polyesters by <i>Pseudomonas oleoverans</i> : Effect of Substrates on Formation and Composition of Poly-(R)-3-Hydroxyalkanoates and Poly-(R)-3-Hydroxyalkanoates," 54(12) <u>Appl. Environ. Microbiol.</u> 2924-2932 (1988).
	Yoshiharu Doi et al., "Biosynthesis and Characterization of a New Bacterial Copolyester of 3-Hydroxyalkanoates and 3-Hydroxy- ω -Chloroalkanoates," 23 <u>Macromol.</u> 3705-3707 (1990).

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		Joanne M. Curley et al., "Production of Poly(3-Hydroxyalkanoates) Containing Aromatic Substituents by <i>Pseudomonas oleovorans</i> ," 29 <u>Macromol.</u> 1762-1766 (1996).
		Kuno Jung et al., "Characterization of New Bacterial Copolyesters Containing 3-Hydroxyalkanoates and Acetoxy-3-Hydroxyalkanoates," 33 <u>Macromol.</u> 8571-8575 (2000).
		Richard A. Gross et al., "Cyanophenoxy-Containing Microbial Polyesters: Structural Analysis, Thermal Properties, Second Harmonic Generation and In-Vivo Biodegradability," 39 <u>Polym r International</u> 205-213 (1996).
		Marianela Andújar et al., "Polyesters Produced by <i>Pseudomonas oleovorans</i> Containing Cyclohexyl Groups," 30 <u>Macromol.</u> 1611-1615 (1997).
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